

**METHOD AND APPARATUS FOR THE AUTOMATIC  
DETERMINATION OF NETWORK CABLE CONNECTIONS  
USING RFID TAGS AND AN ANTENNA GRID**

**5 Abstract of the Disclosure**

Radio Frequency Identification (RFID) tags and an antenna grid are used for automatic determination of cable connections. An RF antenna grid is advantageously employed on a device having a plurality of device ports (*e.g.*, cable connection points) which may, for example, be physically organized in a two-dimensional arrangement.

10 Then, when RFID tags are fixed to one or more cable ends, it can advantageously be determined which of the one or more cables are connected to which of the ports on the device. The RF antenna grid may comprise a plurality of individual antennas which are advantageously multiplexed such that a single RFID reader can handle the sensing for all antennas. Also, opposing ends of a given cable may be advantageously

15 provided with RFID tags having related ID codes such that connections which exist between two connected ports of the device may be easily and efficiently determined.